```
   1 CCGCAACCCC GACGGCGCCC CAAACGCTGT TGCGCCGCGC GCCCCGCCCA
  51 GCCCGGCCTC GCGCTGGTCC CGGTCTCGCC CCGCAGCCCT CGATCTCCCG
 101 TGACTTCCTC GGCCAGGCCG CCTGCGCCTC TGGGACCATG TTGCGCTGGC
 151 TGCGGGACTT CGCGCTGCCC ACCGCGGCCT GCCAGGACGC GGAGCAGCCG
 201 ACGCGCTACG AGACCCTCTT CCAGGCACTG GACCGCAATG GGGACGGAGT
 251 GGTGGACATC GGCGAGCTGC AGGAGGGGCT CAGGAACCTG GGCATCCCTC
 301 TGGGCCAGGA CGCCGAGGAG AAAATTTTTA CTACTGGAGA TGTCAACAAA
 351 GATGGGAAGC TGGATTTTGA AGAATTTATG AAGTACCTTA AAGACCATGA
 401 GAAGAAAATG AAATTGGCAT TTAAGAGTTT AGACAAAAAT AATGATGGAA
 451 AAATTGAGGC TTCAGAAATT GTCCAGTCTC TCCAGACACT GGGTCTGACT
 501 ATTTCTGAAC AACAAGCAGA GTTGATTCTT CAAAGCATTG ATGTTGATGG
 551 GACAATGACA GTGGACTGGA ATGAATGGAG AGACTACTTC TTATTTAATC
 601 CTGTTACAGA CATTGAGGAA ATTATCCGTT TCTGGAAACA TTCTACAGGA
 651 ATTGACATAG GGGATAGCTT AACTATTCCA GATGAATTCA CGGAAGACGA
 701 AAAAAAATCC GGACAATGGT GGAGGCAGCT TTTGGCAGGA GGCATTGCTG
 751 GTGCTGTCTC TCGAACAAGC ACTGCCCCTT TGGACCGTCT GAAAATCATG
 801 ATGCAGGTTC ACGGTTCAAA ATCAGACAAA ATGAACATAT TTGGTGGCTT
 851 TCGACAGATG GTAAAAGAAG GAGGTATCCG CTCGCTTTGG AGGGGAAATG
 901 GTACAAACGT CATCAAAATT GCTCCTGAGA CAGCTGTTAA ATTCTGGGCA
 951 TATGAACAGT ACAAGAAGTT ACTTACTGAA GAAGGACAAA AAATAGGAAC
1001 ATTTGAGAGA TTTATTTCTG GTTCCATGGC TGGAGCAACT GCACAGACTT
1051 TTATATATCC AATGGAGGTT ATGAAAACCA GGCTGGCTGT AGGCAAAACT
1101 GGGCAGTACT CTGGAATATA TGATTGTGCC AAGAAGATTT TGAAACATGA
1151 AGGCTTGGGA GCTTTTTACA AAGGCTATGT TCCCAATTTA TTAGGTATCA
1201 TACCTTATGC AGGCATAGAT CTTGCTGTGT ATGAGCTCTT GAAGTCCTAT
1251 TGGCTGGATA ATTTTGCAAA AGATTCTGTA AACCCTGGAG TCATGGTGTT
1301 GCTGGGATGC GGTGCCTTAT CCAGCACCTG TGGTCAGCTG GCCAGCTACC
1351 CATTGGCTTT GGTGAGAACT CGCATGCAGG CTCAAGCCAT GTTAGAAGGT
1401 TCCCCACAGC TGAATATGGT TGGCCTCTTT CGACGAATTA TTTCCAAAGA
1451 AGGAATACCA GGACTTTACA GAGGCATCAC CCCAAACTTC ATGAAGGTGC
1501 TCCCTGCTGT AGGCATCAGT TATGTGGTTT ATGAAAATAT GAAGCAAACT
1551 TTAGGAGTAA CCCAGAAATG ATGTTGCATT TTTTGCTTTA GCCTGATAAT
1601 TGAAACTTTC AACAATCTCT GGAGTGACTT TTTCTCCTCG AATTGAAACA
1651 AGTCTATGGC AAAAGAAGCT GCATTTTTTT CACAAAAGGG AAGACGGTAA
1701 CAATGGTCAC TTCAAACTTT TGGGCTAAAT TATATGTACA CAGAAATGTT
1751 CAAAATCATA GTTTTAATGT GTTTTGAAAA GGCCACACAA TTATACTTTA
1801 TCTTTTCTTA ATAATCCTGC AAATCTCTGC CCTGAATCCG AAATCTGAAA
1851 ATGTACTGGC TTGAACAAAA TTTGTTTTGT GTGTTAGAGT TATAAATCAT
1901 TAATCTTTAT TTCGGGTGGT TTACGTTTAT GCCAGTTCCT TTATATTTAA
1951 ATTTCTTGTT TTATATATTT TGAATGTCTT TATAGATTTC TTTAAATTTC
2001 CTTATAGAAC CATTAATAGA AAATCATTAC ATTTAAAATA TACCTTACAG
2051 CAAAAGCATC CAAATAAGTA TAGGGTTTAT GTCCTTATTT TTCTTTCAGC
2101 TGAATACGAA TGAACACAGT GGTGGAATTT CTGAAGGGAA GTGATGAAAT
2151 TATATTTATT TCAGTGGGCA CTTTTCCATT TTACCACTGT ACCATTATTT
2201 GGTTCCTGGA GTTATACACT AATTTTCAGT ATATTACTGT TAAATTACCA
2251 ACACAAGGCA ATTTATTTGA AAGATTCCGT TTATCCTGCC ATTGCTTTGA
2301 AAAGCAGCAG GAAACGAAAT TTTTTGACTT GTATCAGCTT CTGCAGAGCA
2351 TCTTTGTTTT CCTTTGTCCT TTGTTTCCTA CCTTTTGAAT CAGATTCCGT
2401 TTTAGTCAGG AAGACTTCTT GGGACCATTC TTAGTAACCT GAAATTTCTT
2451 TTTTAATTGC ATGAAGTGGA TTGATCATGA GCAAGTGATG GGCTTTATTT
2501 CTCCCTCACT GGTGAATATC CTTTGAACTT GCTGTTTGCA ATATGGGCAG
2551 CCACAAAGGG GGAGAGATGC CTATTAAATC GGCGGGGTGT ATGACTTCTG
2601 AAAACATTGG ATACCCTATT TTGAAAAGGG AAAGGCCCAA TTTGGGGAAA
2651 CATATACCAA TGCATGATTT CTG
```

FEATURES:

5'UTR:	1-137
Start Codon:	138
Stop Codon:	1569
3'UTR:	1572

Patent Application Publication

FIGURE 1, page 1 of 2

HOMOLOGOUS PROTEINS:

Top BLAST Hits:

	Score	E
CRA|335001098641184 /altid=gi|11360341 /def=pir||T50686 peroxis...	927	0.0
CRA|11000479457833 /altid=gi|6841066 /def=gb|AAF28888.1|AF12330...	834	0.0
CRA|18000005183605 /altid=gi|7504235 /def=pir||T22688 hypotheti...	432	e-120
CRA|1000682325160 /altid=gi|7499323 /def=pir||T21074 hypothetic...	377	e-103
CRA|89000000196990 /altid=gi|7294582 /def=gb|AAF49922.1| (AE003...	348	9e-95
CRA|150000075553401 /altid=gi|9758252 /def=dbj|BAB08751.1| (AB0...	339	5e-92
CRA|335001098657884 /altid=gi|11358611 /def=pir||T49871 peroxis...	330	2e-89
CRA|163000046661776 /altid=gi|10176874 /def=dbj|BAB10081.1| (AB...	326	4e-88
CRA|105000014652720 /altid=gi|10798831 /def=dbj|BAB16462.1| (AP...	200	3e-50
CRA|335001098655048 /altid=gi|11277065 /def=pir||T47703 Ca-depe...	199	6e-50

BLAST dbEST hits:

gi|10145202 /dataset=dbest /taxon=96...	1108	0.0
gi|1437155 /dataset=dbest /taxon=9606 ...	801	0.0
gi|10333851 /dataset=dbest /taxon=96...	745	0.0
gi|8469752 /dataset=dbest /taxon=960...	363	8e-98
gi|11684041 /dataset=dbest /taxon=96...	307	4e-81

EXPRESSION INFORMATION FOR MODULATORY USE:

library source:

Expression information from BLAST dbEST hits:

gi|10145202 Placenta Choriocarcinoma
gi|1437155 Retina
gi|10333851 Uterus leiomyosarcoma
gi|8469752 Breast
gi|11684041 Ovary fibrotheoma

Expression information from PCR-based tissue screening panels:

Leukocyte

FIGURE 1, page 2 of 2

```
  1 MLRWLRDFAL PTAACQDAEQ PTRYETLFQA LDRNGDGVVD IGELQEGLRN
 51 LGIPLGQDAE EKIFTTGDVN KDGKLDFEEF MKYLKDHEKK MKLAFKSLDK
101 NNDGKIEASE IVQSLQTLGL TISEQQAELI LQSIDVDGTM TVDWNEWRDY
151 FLFNPVTDIE EIIRFWKHST GIDIGDSLTI PDEFTEDEKK SGQWWRQLLA
201 GGIAGAVSRT STAPLDRLKI MMQVHGSKSD KMNIFGGFRQ MVKEGGIRSL
251 WRGNGTNVIK IAPETAVKFW AYEQYKKLLT EEGQKIGTFE RFISGSMAGA
301 TAQTFIYPME VMKTRLAVGK TGQYSGIYDC AKKILKHEGL GAFYKGYVPN
351 LLGIIPYAGI DLAVYELLKS YWLDNFAKDS VNPGVMVLLG CGALSSTCGQ
401 LASYPLALVR TRMQAQAMLE GSPQLNMVGL FRRIISKEGI PGLYRGITPN
451 FMKVLPAVGI SYVVYENMKQ TLGVTQK
```

FEATURES:
Functional domains and key regions:
[1] PDOC00001 PS00001 ASN_GLYCOSYLATION
N-glycosylation site

254-257 NGTN

[2] PDOC00005 PS00005 PKC_PHOSPHO_SITE
Protein kinase C phosphorylation site

Number of matches: 2

1	229-231 SDK
2	475-477 TQK

[3] PDOC00006 PS00006 CK2_PHOSPHO_SITE
Casein kinase II phosphorylation site

Number of matches: 8

1	22-25 TRYE
2	65-68 TTGD
3	121-124 TISE
4	157-160 TDIE
5	170-173 TGID
6	179-182 TIPD
7	185-188 TEDE
8	227-230 SKSD

Replacement Sheet

[4] PDOC00008 PS00008 MYRISTYL
N-myristoylation site

Number of matches: 16

1	52-57	GIPLGQ
2	119-124	GLTISE
3	171-176	GIDIGD
4	201-206	GGIAGA
5	202-207	GIAGAV
6	245-250	GGIRSL
7	253-258	GNGTNV
8	283-288	GQKIGT
9	295-300	GSMAGA
10	322-327	GQYSGI
11	326-331	GIYDCA
12	359-364	GIDLAV
13	392-397	GALSST
14	399-404	GQLASY
15	442-447	GLYRGI
16	446-451	GITPNF

[5] PDOC00018 PS00018 EF_HAND
EF-hand calcium-binding domain

Number of matches: 3

1	32-44	DRNGDGVVDIGEL
2	68-80	DVNKDGKLDFEEF
3	99-111	DKNNDGKIEASEI

Membrane spanning structure and domains:

Helix	Begin	End	Score	Certainty
1	292	312	1.053	Certain
2	345	365	0.613	Putative
3	381	401	1.544	Certain
4	446	466	0.733	Putative

FIGURE 2, page 2 of 4

BLAST Alignment to Top Hit:

```
>CRA|335001098641184 /altid=gi|11360341 /def=pir||T50686 peroxisomal
          Ca-dependent solute carrier [imported] - rabbit
          /org=rabbit /taxon=9986 /dataset=nraa /length=475
         Length = 475

 Score =  927 bits (2371), Expect = 0.0
 Identities = 454/477 (95%), Positives = 466/477 (97%), Gaps = 2/477 (0%)

Query: 1   MLRWLRDFALPTAACQDAEQPTRYETLFQALDRNGDGVVDIGELQEGLRNLGIPLGQDAE 60
           MLRWLR F LPTAACQ AE PTRYETLFQALDRNGDGVVDI ELQEGL++LGIPLGQDAE
Sbjct: 1   MLRWLRGFVLPTAACQGAEPPTRYETLFQALDRNGDGVVDIRELQEGLKSLGIPLGQDAE 60

Query: 61  EKIFTTGDVNKDGKLDFEEFMKYLKDHEKKMKLAFKSLDKNNDGKIEASEIVQSLQTLGL 120
           EKIFTTGDVNKDGKLDFEEFMKYLKDHEKKMKLAFKSLDKNNDGKIEASEIVQSLQTLGL
Sbjct: 61  EKIFTTGDVNKDGKLDFEEFMKYLKDHEKKMKLAFKSLDKNNDGKIEASEIVQSLQTLGL 120

Query: 121 TISEQQAELILQSIDVDGTMTVDWNEWRDYFLFNPVTDIEEIIRFWKHSTGIDIGDSLTI 180
           TISEQQAELILQSID DGTMTVDWNEWRDYFLFNPV DIEEIIRFWKHSTGIDIGDSLTI
Sbjct: 121 TISEQQAELILQSIDADGTMTVDWNEWRDYFLFNPVADIEEIIRFWKHSTGIDIGDSLTI 180

Query: 181 PDEFTEDEKKSGQWWRQLLAGGIAGAVSRTSTAPLDRLKIMMQVHGSKSDKMNIFGGFRQ 240
           PDEFTE+E+KSGQWWRQLLAGGIAGAVSRTSTAPLDRLK+MMQVHGSKS  MNIFGGFRQ
Sbjct: 181 PDEFTEEERKSGQWWRQLLAGGIAGAVSRTSTAPLDRLKVMMQVHGSKS--MNIFGGFRQ 238

Query: 241 MVKEGGIRSLWRGNGTNVIKIAPETAVKFWAYEQYKKLLTEEGQKIGTFERFISGSMAGA 300
           M+KEGG+RSLWRGNGTNVIKIAPETAVKFW YEQYKKLLTEEGQKIGTFERFISGSMAGA
Sbjct: 239 MIKEGGVRSLWRGNGTNVIKIAPETAVKFWVYEQYKKLLTEEGQKIGTFERFISGSMAGA 298

Query: 301 TAQTFIYPMEVMKTRLAVGKTGQYSGIYDCAKKILKHEGLGAFYKGYVPNLLGIIPYAGI 360
           TAQTFIYPMEVMKTRLAVGKTGQYSGIYDCAKKILK+EG GAFYKGYVPNLLGIIPYAGI
Sbjct: 299 TAQTFIYPMEVMKTRLAVGKTGQYSGIYDCAKKILKYEGFGAFYKGYVPNLLGIIPYAGI 358

Query: 361 DLAVYELLKSYWLDNFAKDSVNPGVMVLLGCGALSSTCGQLASYPLALVRTRMQAQAMLE 420
           DLAVYELLKS+WLDNFAKDSVNPGV+VLLGCGALSSTCGQLASYPLALVRTRMQAQAMLE
Sbjct: 359 DLAVYELLKSHWLDNFAKDSVNPGVLVLLGCGALSSTCGQLASYPLALVRTRMQAQAMLE 418

Query: 421 GSPQLNMVGLFRRIISKEGIPGLYRGITPNFMKVLPAVGISYVVYENMKQTLGVTQK 477
           G+PQLNMVGLFRRIISKEG+PGLYRGITPNFMKVLPAVGISYVVYENMKQTLGVTQK
Sbjct: 419 GAPQLNMVGLFRRIISKEGLPGLYRGITPNFMKVLPAVGISYVVYENMKQTLGVTQK 475


>CRA|11000479457833 /altid=gi|6841066 /def=gb|AAF28888.1|AF123303_1
          (AF123303) calcium-binding transporter [Homo sapiens]
          /org=Homo sapiens /taxon=9606 /dataset=nraa /length=411
         Length = 411

 Score =  834 bits (2132), Expect = 0.0
 Identities = 409/410 (99%), Positives = 409/410 (99%)

Query: 8   FALPTAACQDAEQPTRYETLFQALDRNGDGVVDIGELQEGLRNLGIPLGQDAEEKIFTTG 67
           F LPTAACQDAEQPTRYETLFQALDRNGDGVVDIGELQEGLRNLGIPLGQDAEEKIFTTG
Sbjct: 1   FVLPTAACQDAEQPTRYETLFQALDRNGDGVVDIGELQEGLRNLGIPLGQDAEEKIFTTG 60

Query: 68  DVNKDGKLDFEEFMKYLKDHEKKMKLAFKSLDKNNDGKIEASEIVQSLQTLGLTISEQQA 127
           DVNKDGKLDFEEFMKYLKDHEKKMKLAFKSLDKNNDGKIEASEIVQSLQTLGLTISEQQA
Sbjct: 61  DVNKDGKLDFEEFMKYLKDHEKKMKLAFKSLDKNNDGKIEASEIVQSLQTLGLTISEQQA 120

Query: 128 ELILQSIDVDGTMTVDWNEWRDYFLFNPVTDIEEIIRFWKHSTGIDIGDSLTIPDEFTED 187
           ELILQSIDVDGTMTVDWNEWRDYFLFNPVTDIEEIIRFWKHSTGIDIGDSLTIPDEFTED
Sbjct: 121 ELILQSIDVDGTMTVDWNEWRDYFLFNPVTDIEEIIRFWKHSTGIDIGDSLTIPDEFTED 180

Query: 188 EKKSGQWWRQLLAGGIAGAVSRTSTAPLDRLKIMMQVHGSKSDKMNIFGGFRQMVKEGGI 247
```

Replacement Sheet

```
          EKKSGQWWRQLLAGGIAGAVSRTSTAPLDRLKIMMQVHGSKSDKMNIFGGFRQMVKEGGI
Sbjct: 181 EKKSGQWWRQLLAGGIAGAVSRTSTAPLDRLKIMMQVHGSKSDKMNIFGGFRQMVKEGGI 240

Query: 248 RSLWRGNGTNVIKIAPETAVKFWAYEQYKKLLTEEGQKIGTFERFISGSMAGATAQTFIY 307
           RSLWRGNGTNVIKIAPETAVKFWAYEQYKKLLTEEGQKIGTFERFISGSMAGATAQTFIY
Sbjct: 241 RSLWRGNGTNVIKIAPETAVKFWAYEQYKKLLTEEGQKIGTFERFISGSMAGATAQTFIY 300

Query: 308 PMEVMKTRLAVGKTGQYSGIYDCAKKILKHEGLGAFYKGYVPNLLGIIPYAGIDLAVYEL 367
           PMEVMKTRLAVGKTGQYSGIYDCAKKILKHEGLGAFYKGYVPNLLGIIPYAGIDLAVYEL
Sbjct: 301 PMEVMKTRLAVGKTGQYSGIYDCAKKILKHEGLGAFYKGYVPNLLGIIPYAGIDLAVYEL 360

Query: 368 LKSYWLDNFAKDSVNPGVMVLLGCGALSSTCGQLASYPLALVRTRMQAQA 417
           LKSYWLDNFAKDSVNPGVMVLLGCGALSSTCGQLASYPLALVRTRMQAQA
Sbjct: 361 LKSYWLDNFAKDSVNPGVMVLLGCGALSSTCGQLASYPLALVRTRMQAQA 410


 Score = 80.0 bits (194), Expect = 6e-14
 Identities = 80/388 (20%), Positives = 156/388 (39%), Gaps = 59/388 (15%)

Query: 95  FKSLDKNNDGKIEASEIVQSLQTLGLTISEQQAELILQSIDV--DGTMTVDWNEWRDYFL 152
           F++LD+N DG ++  E+ + L+ LG+ + +   E I  + DV  DG +
Sbjct: 21  FQALDRNGDGVVDIGELQEGLRNLGIPLGQDAEEKIFTTGDVNKDGKL------------ 68

Query: 153 FNPVTDIEEIIRFWKHSTGIDIGDSLTIPDEFTEDEKKSGQWWRQLLAGGIAGAVSRTST 212
                D EE +++ K                   + EKK    ++ L          +
Sbjct: 69  -----DFEEFMKYLK------------------DHEKKMKLAFKSLDKNNDGKIEASEIV 105

Query: 213 APLDRLKIMMQVHGSKSDKMNIFGGFRQMVKEGGIRSLWRGNGTNVIKIAPETAVKFWAY 272
             L  L + +    ++    +I       V     R  +  N    I    E  ++FW +
Sbjct: 106 QSLQTLGLTISEQQAELILQSIDVDGTMTVDWNEWRDYFLFNPVTDI----EEIIRFWKH 161

Query: 273 EQYKKL---------LTEEGQKIGTFER-FISGSMAGATAQTFIYPMEVMKTRLAV-GKT 321
                +          TE+ +K G + R  ++G  +G  A ++T    P++ +K  + V G
Sbjct: 162 STGIDIGDSLTIPDEFTEDEKKSGQWWRQLLAGGIAGAVSRTSTAPLDRLKIMMQVHGSK 221

Query: 322 GQYSGIYDCAKKILKHEGLGAFYKGYVPNLLGIIPYAGIDLAVYELLKSYWLDNFAKDSV 381
                I+   ++++K  G+ + ++G   N+ I P   +    YE  K         ++
Sbjct: 222 SDKMNIFGGFRQMVKEGGIRSLWRGNGTNVIKIAPETAVKFWAYEQYKKL----LTEEGQ 277

Query: 382 NPGVMVLLGCGALSSTCGQLASYPLALVRTRMQAQAMLEGSPQLNMVGLFRRIISKEGIP 441
             G       G+++    Q   YP+ +++TR+   A+ +      +    ++I+  EG+
Sbjct: 278 KIGTFERFISGSMAGATAQTFIYPMEVMKTRL---AVGKTGQYSGIYDCAKKILKHEGLG 334

Query: 442 GLYRGITPNFMKVLPAVGISYVVYENMK 469
             Y+G  PN + ++P  GI    VYE +K
Sbjct: 335 AFYKGYVPNLLGIIPYAGIDLAVYELLK 362
```

Hmmer search results (Pfam):

Model	Description	Score	E-value	N
PF00153	Mitochondrial carrier proteins	305.4	3e-88	1
PF00036	EF hand	50.7	1.7e-12	3
PF00404	Dockerin domain type I	9.7	0.26	1
PF01978	Protein of unknown function	2.7	9.5	1

Parsed for domains:

Model	Domain	seq-f	seq-t		hmm-f	hmm-t		score	E-value
PF00036	1/3	27	51	..	5	29	.]	18.7	0.002
PF00404	1/1	67	85	..	1	22	[]	9.7	0.26
PF00036	2/3	61	87	..	3	29	.]	19.7	0.001
PF00036	3/3	90	118	..	1	29	[]	17.2	0.0051
PF01978	1/1	110	121	..	1	13	[.	2.7	9.5
PF00153	1/1	193	472	..	1	313	[]	305.4	3e-88

FIGURE 2, page 4 of 4

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   1 AACCCATGTT AGTGTGCAGT TCTGCTGGCA CACACATGCA GTTGTGTAAC
  51 CACTACCACC AAAAGCAAGA TGTAAAATAG CTCCATCACC CCCACAAGCC
 101 TTCTGATGCT CTTTTGTCAT CAATTCCCTT CCCGCTAGTC ACAACTGGTA
 151 ACTACTGATT TGTTTTCTGT CCCTATAGTT TTGCCTTTTC CAGAATGTCA
 201 TTGTTGACAG GTATCAGTAA TTCATTCCTT TTTATTGCTA ATTACTATCT
 251 CACTGTATGA ATGCAACACA GGTTGTTTAC CAGTTCACCC GTTAAAGAAC
 301 ATTTTGTTTC TGCGCTTGAC AGTTATGAAT AGAACTGCTA TAAACCCTCA
 351 AGTAAAAGTT TTGGTGTGAA GATAATTTTC TCAGCAAAAA CGCTGACAGG
 401 TAATTTTTCT AAGTATTACT TTTTTAAAAA AGTAAAATAG CCTGTAGCCC
 451 CAGCTACTCA GGAGGCTGAG GCAGGAGAAT AGCTTGAACC CAGGAGGCGG
 501 AGGTTGCAGT GAGTTGAGAT TGTGCCACTG CATTCCAGCC TGGGCGACAG
 551 AGCTAGACTG TCTCAAAGAA AAAAAAAAAA AATAACAAAT AAATAAAAAG
 601 TAAAATGAAA GCATGTAAGT GTAAGATGAC TAGTTCAAGC AACCTCTCTT
 651 CAAGTACAGA GTATTCAGAG TAGAGATTAA AAGAGGTTTT CAAGGACAGA
 701 GAAAATTTGA AGTTTGAAGG CAGTTCCAAA GGAAGGCAAT GATTCTTAAT
 751 AAGACTGGAA GTTGGAAGTA ATATAAAAAG ATAAATCAGT TTCAAGATGA
 801 TTTTACTAAG CAGGCAGCCC TTAATTTACA AATTCTAGAT TCATACATAT
 851 CTTAAACATA CAAAATGATA TGAGGAGAGG TAAGTTCAGG GTCTGAGTTC
 901 CTGGCTGTTG TTGGAACTGA TTTCTGTGTA GTGATTCAGA AGATGTGAGA
 951 CACCCTAATT TACAAGTACA GAGGTATCTT CTTTTCTGCA AACAGCAGTA
1001 CAACAATAGT TCCTCTTACG CAGCTGTGAA TGAACAGGAT TATTACAATT
1051 AATGATATCT CATTTGATTG GCGCCTTAGA GAATTAAGAC CTTTCACACC
1101 TAATATACAA CTTTGTTGTG AAGGCAGATA TTTATATTCT CATTTTACTG
1151 ATGAGAGACT ACCCGGAGAC GCTATGTCAC ACCTGAAGGA TTAGGTACTT
1201 TCTCTGTTAA GTCCAATGTT CCTTCCGTTA TTCCATGCTA GGCAGTAATA
1251 AGTTCTGTCT TGCCTGAGTA ATAAGCTCCA AACCTCGGAA CTGCACCCAT
1301 CTTGAGAAGG AGGAGGGCGC TGTGGTTTTT TCTGATAAGT GCAGCTGGCA
1351 GACACTCTAT ACGCTTAATC ACGGGCAAAT CCTACCTAAG CTGCCTACCA
1401 AACTAGTCCT TCTTTTCCCC GTTGCCCACG CAGATGGCTG TTGATCTTTT
1451 CTGCAACAAA TCCAGGAGTT TCTCCTTTTT GTTTTATAAT TGCTCCAATA
1501 GATGCTTTAG GATTTAACTC TCTGCTTTTT AAAGCAGAAT CGCCATCCCA
1551 GGTGTGCAAC CACGAAAAAA TTAGACATCC GTGAGAGACA ATGCCCTCCA
1601 TGGCCCAGTT TCCAGGCAGA GAGAAGCAGC TCTGGGCTGA CCGCCAAGGC
1651 TCCGGCCCGA GAGGGTCTTT AAGTGGAGTA ACCAGTCTTC AAGACCCCGC
1701 TCCCAAGCCA CCGACGCGCT GACGCTGCAG CCCTGGACCT GCTGGGGGCC
1751 TCTTCCTCGG ACCCGCATGC TGACAGCGGG ACTGGCAACT GGGCAGAGGT
1801 CGACCCCGGG TCCGCACAGC ACCTCCCGAG ACCCAGCTCC CAGCTCCCTC
1851 ACTTCCGGCT CTCTGGAGGC GGGCCCGGCC AGTGCCGCCG AGGCCAGCGC
1901 GGCGAGCTCC TCCCCAGCAG CGGCGGGACG GCCACACCCT GCGCGCCGCG
1951 CGGGCTCGGG TGGGGTCTCC GCTCCTGCGC CCTGCGCGCC GCAGCCGCAC
2001 CCCCGACGGC GCCCCAAACG CTGTTGCGCC GCGCGCCCCG CCCAGCCCGG
2051 CCTCGCGCTG GTCCCGGTCT CGCCCCGCAG CCCTCGATCT CCCGTGACTT
2101 CCTCGGCCAG GCCGCCTGCG CCTCTGGGAC CATGTTGCGC TGGCTGCGGG
2151 ACTTCGTGCT GCCCACCGCG GCCTGCCAGG ACGCGGAGCA GCCGACGCGC
2201 TACGAGACCC TCTTCCAGGC ACTGGACCGC AATGGGGACG GAGTGGTGGA
2251 CATCGGCGAG CTGCAGGAGG GGCTCAGGAA CCTGGGCATC CCTCTGGGCC
2301 AGGACGCCGA GGAGGTGGGT CGCCGCCGGG GCGCCGCCTG AGCGTAGGGA
2351 GGGCTGCGGG CGCTGGGGAC ACTGCGAGGA CCGAGGAGGG CGGCGGCTTG
2401 AGGCGTTGCC AGGAGAGGAA GGAGGAACTG TGGCGCCCAG CGCTCCGGTG
2451 GCTTCAGAAA CTCGGGCGTG GGGCCGCGAC CGGCGACCCC GGTAACAGAA
2501 GTGGGTCATA ATACGAAAGT CTACTGGTAT TTGTCCAGAT AAAATGAGTG
2551 TTGTGGACAC TCTGGCCCAC GGGCACTGTT AAATTTTTAA GACACTTTTG
2601 TCCTGAATCC ATCCCAGGTT CTTTGTTTTC TGTTTTAATA CCTTGCAGAC
2651 ATGTAATCCG TTTTAGCTGT CAGACTTCAG TGGGTCCCAA GTTTTGTATA
2701 AAGGCGCACA CATTCGATCT CTTTCGAAGC TGCTTTGTTA CAGCAGCTAT
2751 GTGTATTGTC TACTGTTTGA AAACTGTTTG AAAACCAATC GCGTGTTTCC
2801 CCCACTTCCT GTTGAGAAGG AATGGCGGCA TTCCATTGTT TAAGACATTC
2851 CTAGGTTAAT GCCCTAGGTA CATAAATTGA TCTGAAGGGT TGACTTGACC
2901 TGCGACTGAG CAATTTCATT TTCTCTGAGT CATCTTAACT GTGCCCCTGA
2951 ACTTCTGCCC CTTTAGTAGG GTGGAGATAT GTGGAACTTC TCCAACCCTG
3001 TTGAAGCGTT CCCTGACACT GGCATTCTCT TATCCAAAGA GGGAAAGTGA
3051 TTAGGTTACT ATGAGGGCCA ACAACTGTTA TATAGTTATA TTTCACTTCT
3101 CTTTTAATGT CTTTGGTAGT TATAGGCCTC TTCAGTTTAC TGTTTCTTCT
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Patent Application Publication Nov. 20, 2008

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Patent Application Publication

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Replacement Sheet

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Replacement Sheet

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59901 TACAAACCAC TAGGTTAGAC ACTGGATCTG GGGATTCAAA GGACTCAATG
59951 TGTGCCTTGA AGAAACTGAA GGTCTGGTGG GGGAGACAAA CGACTAAAAC
60001 TCAGCGTGGT TATCTGTGCT GCGACAGACA TGAGCCAGGG TGCATGTTAG
60051 GATGAGACCT AAGCTACAGC GTAGAGGAAG AGTGGAATGT GTAATGAAAA
60101 GAAGAGTCGA ATTTTTTTTT TAAAGAGCTT TATTGAGATT TAGTTCATAT
60151 TCCTTACATT TCACTCATTT GAAGTGTACA AGCAAATGGT TTTTGGCTTC
60201 TTACATAATT TTTAAAAATT ATTATAAAAT ATAAAATTTG CCATTTTACT
60251 AATTTTAAGT GTACAATTCA GTGGCATTAA TTACATTCAC AATATTGTGC
60301 AACCATCAAC ACTATTTCCA AATCCTTTTC CTCACTCCAA ACAGAAACAC
60351 CTTAACCTTT AAGCAATAAC TTCCTACCCT CCGTAACTCA AACCTTTGGT
60401 AACCTCTAAT CTGCTTTCTA TGTCTAGGAA TTTACCCATT CAAGATATCT
60451 TATAAGTAGA ATCATACAGT ATTTTTCTTT TTGTGTCTGA TTTATTACTC
60501 TTAGCATAAT GTCTCTAAGG TTTGTTCATG TTGTAGCATG TATCAGAACT
60551 TCATTTCTTT TCATGGCTGA GTAATATTCC GTTATGTGTA TATACCACAT
60601 TTTGTTTAGT CCTTCATCTG TTGAAGAGCA TTTGGATTAT TTCTACTTTT
60651 CCAACATTGT GAATAATGCT GCAGTGAACA TTGGCATCTG CGTATCTGTT
60701 CGAGTCTATG CCTTCAATTC CTTTGGGTAT ATATCTCAGA ATGGAATTGC
60751 TGAGCCATAT GGTCATTCTG TGTTTAGCTT TTAGGAACTA TGAGACTGTT
60801 TTCCATAGTG GCTGCACTTA CATTCTCACC AGCAACATAC AAAGGTTCCA
60851 GTTTTTCCAC GTCCTTATTA ACACTTAATT TCCATTTTAA AAAAGCTTAT
60901 TTTTATTATG GCCGTCCTCT TAGGTGTGAG GTGGTATGGT TCAGGACTTT
60951 ACTTCTTGTG CTGAGTTTTT TAAAAAATTG TGATTAAAAA CACATAACAT
61001 AAAGTTTATG ATTTTAACCA TTTTTAAATA TATAGTACAG TAAGTGTTAA
61051 CTGTTTGTGG TTTGTTGTGC AACAGATCTC TAGAACTTTT TCACTTCTCA
61101 AAACTTAAAC TCTATAGTCA TTAAACAACA GCTCCCAATT TCCCCTTCAC
61151 CCCAGCGCTG TGTAACCTAC TTTCTCGTTT TATGAGTTTG ACTACATTAA
61201 ATACCTTGTA TAAGTGAAAT CATGTGGTAT TTCTCTTTCC GTGACTGGCT
61251 TATTTCATGT AACATAGTTT CCTCATGATT CATCCATATG ATAGCATACA
61301 ACAGGACTTT TTTGTTTTTA AGGCTGAATA ATAATTTGTT GGGTATATAT
61351 ATCACATTTT CTTTATTCAT CTGTTGATGG ACATTTGGAT TGTTTCTACA
61401 TCTTGACTAT TGTGAATAGT GCTGCAGTGA ACATGGTTGT GCAAATATCT
61451 CTTCAAGATA CTGTTTTCAG TTCTTTTTGA CATATACTCA GAAGTGGAAT
61501 TTCTGGGTCA AATGGTAATT CTATTTTTAA GTTTTTGAGG AACCTCCATG
61551 TCATTTTCCA TAGTAACTAG ACCTTTTTGT TTTTTAACAT TTCTATCAAT
61601 GTACACCAAG ATTCCAATTT CTCCATGTCC TCCCCAACAC CATTAAGTGG
61651 GGTGGTGGTC TACTACTATT GCTGTGTTGC TGTTTATTCC TCCCTTCAGT
61701 TCTGTAAGTG TTTGCTTCAT ATATTTAGGA GCTTAATATT AGGTCCATAT
61751 GAAGTTATAA TTTCTTCCTG GTAAAGTGAC CCATTTATCA TTATGTAATG
61801 TCCATCTTTG TCTCTTGTGA CAGTTTGTGT CTTAAAATCT ATTTTGTCTG
61851 ATGTAATTAT GGCCACCCCT TTTCTCTTTG GGTTCCCGTT TTTATGGAAT
61901 ATCTTTTTCC ATCCTTTCAC TTTCAGCTTA TGTGTGTCCT TAGATCTAAA
61951 GTGAGTCTCA TAGATAAGGT ATAGTTGATT CTGTATGTGT TATTCACTCA
62001 GCAATTTATA TCTTTTAGTT AGGGGATTTA ATCCATTTAC ATTTAAAGCA
62051 GTTACTGATA GGGAAGGACT TACTGTTGTC ATTTGGCTAG CTACCTTTTT
62101 ATCTTTGTCC TGTGGCTTTT CTGTTTTTCC CTTCCTCTCT TCCTGGCTTC
62151 TTCTGTGTTT TGTTGATTTT TTTTTTTTTT GTAGTGATAT GTTCTGATTC
62201 CCTTCTCATT TCCCTTTGTG TGCATTCTAT AGATGCTATT TTTGTGGTTA
62251 CCATTGCAAC TACATAAAGC ATACTAAAGT TATAGCAACT TATTTTAAGC
62301 TGTTTACAAC TTAACTTCAG TGGTATATAA AACTCTATTT CTTTACATAT
62351 TTCACCTCCT CCCCACAAAC TTTATGTCTT TTGATATTGT ATATCCTTAA
62401 CATAGATTTA TAGTTACTTT TTATGCTTTT CTTCTTTAAA TTCTGTTTAA
62451 ATTTTGTTTT TGAAATTTAG ATTTTCAAGT TATTTATATA CCTTCATTAC
62501 AATACTATAG GATTTTATAA TATTCTAAAT ATTGACCTTT ACCATAGAGT
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62601 TTTAGCCTTT CTTGTAGGGC CGGTCTAGTG GTGATAAGCT GTATCAGCTT
62651 TTGTTTGTCA GGGACAGTCT TAATTTCTCC TTTTTTGAAG GGCAGTTTTG
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62751 TATAACATTC CATTTCCTTC TAACCTGCAA GATTTCCATT GAGAAATGCA
62801 CTCAATGGAT TTTTTAATCC ATTGAGATAA TTTTTTAATC CTGTAGGATT
62851 TAAAATTTTT AGTCTTACAG GATTAAAAAA TTAAAAAGTT AAACTTGTTA
62901 TATAACATAT TAACATGTAT TTTATACTTA AAGTATCTTA TGTTTAAAAA
62951 GTTGATTATC ATATATATTT TATACAGTTT CTCCTAATTA TTGCCTTCTA

63001 ATGAAATACA GGGACCTAGA GTAACAGGGA TAAAGTATGG CCTTTTGATC
63051 AGCACGCCTG GTTCTGAGTC CTTCTTAAAA AAACTCTGGG CCTGGTGTGG
63101 TGGCTCATGC CTATAATCTC AGCACTTTGG GAGGCCGAGG CGGGCGGATC
63151 ACCTGAGGTC AGGAGTTTGA GATCAGCCTT GCCAGCATGG TGAAACCCTG
63201 TCTCTACTAA CAGTACAAAG ATTAGCTGGG CGTGGTGGTG GGTGCCTGTA
63251 ATCCAAGCTA CTCAGGAGGC TGAGGCAGAA GAATCGTTTG AACCTGGGAG
63301 GCAGAGATTG GGCCACTGCA CTACAGCCTG GGTGACAAGA GCGAGACTCC
63351 ATCTCAAAAA AACAAACAAA AACTCCGCTG AGATGAATTT TTCTCATTTC
63401 TAAAATCAGA ATAATAGATT TATGTAAGAG TTTCTGTAAG GCTCAAATGA
63451 AATATATGTA ACGTGTAAAA TGAGATACAA TTAGTAGAAT TATATTATTT
63501 TATTAATACT CACCATAAGA GGTGTTCTTT AGATCCTGCA GCGTTTGCTG
63551 CGCAGTTCAC GTTTGTTTAG AAGAATGTCA GTAACCGGTG CAAACCTCAT
63601 GTGTTCCGCA CCCCCAGTGG CCTCCCACCT CTCCACAGAG TCACCGCCTC
63651 CTGCAGTGCC TGCTGCTTCT GCAAATGCGT GGCCTCATCC TGCAGAAACG
63701 GGGCTTCTCA TGAGGTTGAG AATAGCTGTG AAAATGTTTA CGTTGAAGTT
63751 GTAGAGTTCG TTAATTATTT TCTTCTTTAT TTCTCTGGCA GCTCTTGAAG
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63901 GCTACCCATT GGCTTTGGTG AGAACTCGCA TGCAGGCTCA AGGTGAATTT
63951 TTGATTACAG AACCACACCG ATAAAAGTGC TGCACCAGTA ATGTGCTTTT
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64051 CTCAACCTTT TTTTCATTAT TGCCTCCTTA AGGAATCTTT TCAGAAATTC
64101 TTTTTCTAAA TGCTCCCTCG TCATGAAATT TTAATGCGAC AGAAGCATTG
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64201 TTTTTTGACT GTGTTACATG CACGTTTTAA GATTATAAGC TTTAGTATCT
64251 GATGGATTTG GGTTCAGATC CTTGCCTCAG ACTTCTTGGG GTTTTTAATG
64301 GGAATGAAAA TTGTACAGTG TTGTAAGAAT TACCAACAAT ATAAATAAAG
64351 CATCTTGGGT TTGTTAAATT TTTGGTAAAT GGTGGTTGGA ATCATTTTTT
64401 AGTGTTGCGT AGACCCTACA AGTTTTGAGC TGTGATTCCT CCTCACTGTG
64451 ACACTGTCTC CATTGTTGGC TTTGATTACA CTGTACCATC CTGGTTGTTC
64501 TGCCAGCCCA TTGATAACTT TTACCATTTG CTGGCTTTTA TTGCTATCCC
64551 CACTCTATTA AAGTATGCAT TCAAATGCCT TTCTTTTCTC TTTGATGCTT
64601 TCCCTGGTCA GTCTTATCCA TTGTTTTCTT AAGTAGTACA CCTTGGGCAT
64651 CTACAGCTCT ATTCCCAACC TCCCTTCCAA GTGCCAGCCA CAGCAACCCC
64701 AGCCAAGCAG TCAGTAACTA ATTGGCAAAT ACTCCCTGAG CCATTGTCCC
64751 ATTCTAGACA CTGCCAGATG CTAGGGGTAG AGCAGTCAAC AAGTCAGGTG
64801 TGGCCCCGCC AGTGTAGAGT AGAGAAGACG TTATGTCCAG CAAGTAAACA
64851 ACCTGGTTAA ACCAACTCCT CTTTTGTTAG GGGAGCACAG AGCAAGGAGC
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64951 AAAGATGAGT GGGAGTTAGC TGGGCACAGG CCAGTGGAGT GGGAACAGAA
65001 AACATTCCAG TTGAGGGAAA GCATGTGTGA AGACACTGAG GCAGGCACCA
65051 ACATGGTGTA TTTAAGGAGC TGAGAGACAG TCATGGCTGT AGAGAAAAAC
65101 ACAAAGTAGT GAACTACACG TTTCTTGTGT ATTCTCTCAT TTCACCATCA
65151 TAACCATCTT GGGGATGGGA ATACTAACAT TATCCCCATT TTTCAGATGA
65201 GCAACTGGGG CAGAGAGAAT TTAAGTAACT CCCACAAGAT TATACCTGTG
65251 GTAAATAGTG GGACTGAAAT TCAGACACAT GCAGTCTGAT TCTAACCCTC
65301 CTGTCTGCCA GCTCTGATCC AGAACTTTGC ATGACTGATA CGGCTGATAG
65351 ATTGTCTATG GCTGATAGAC TGTCATTTCT GACCTAAAAG TCTGATCATT
65401 TTACATCTGT TCAGACATCT TTGCAGCCTT TCGGTGTCAG TTCCAAAGTT
65451 GTTAGTGGGA ATTTCAAAGC CTTTAATAAT CTAGCCCCAC TTTGTTCACT
65501 CTCTGTGTAA TAACCACATA CAACAATTGG CTGCATCTCC ATAGCACATG
65551 GTACTCCTCC CGTTGTCTTG GTTGTGCCAG CAACACTGGT TTTCGCTTTC
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65651 CCCAAGCTTC CCAGAGCTTC TTCCATACTC CCCTTACTTC CTGAGATTTA
65701 ACTGTTCTCT CTTCAGCGCT TGTCTAGTAA GAAGGAGGCA GCAGCAGCAC
65751 TGTGGGGTGG TGGAAAGTGT ACCAGCTTTG GAGTCAGACC ATTGGATCTC
65801 AGCCCTACCA TTTTCTACTT AGATTTTTTT AGGACAAATT TCTCCATCTT
65851 TCTAAGCCTC CAATTGCTCA CTTACAAAAT TGATATAACA TTTACCTTGC
65901 AAGATTGGTA TGGAAGGTAA TTAACCCAGT ATTTAGAACA TAGTAATTAA
65951 TAAATAACTA TTATTACCAT CATTACTATA GTTAGGACAC TCACTGTTAG
66001 GTGCTATACA AAGAGGATCA TAAAAGGGAT GTTGTCTTGG GCTTCTTGGA
66051 ATAAATGTTG TCCTTTTACT GTATTTTAGA ATATCATTCT GGGTCATAAT
66101 TGTTTGTTGT CATAATAATG AAACATACTT GAATATTAAA TTACCCTCTT

66151 TTTTTATTTT TTAGCCATGT TAGAAGGTTC CCCACAGCTG AATATGGTTG
66201 GCCTCTTTCG ACGAATTATT TCCAAAGAAG GAATACCAGG ACTTTACAGA
66251 GGCATCACCC CAAACTTCAT GAAGGTGCTC CCTGCTGTAG GCATCAGTTA
66301 TGTGGTTTAT GAAAATATGA AGCAAACTTT AGGAGTAACC CAGAAATGAT
66351 GTTGCATTTT TTGCTTTAGC CTGATAATTG AAACTTTCAA CAATCTCTGG
66401 AGTGACTTTT TCTCCTCGAA TTGAAACAAG TCTATGGCAA AAGAAGCTGC
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66501 GGCTAAATTA TATGTACACA GAAATGTTCA AAATCATAGT TTTAATGTGT
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66601 ATCTCTGCCC TGAATCCGAA ATCTGAAAAT GTACTGGCTT GAACAAAATT
66651 TGTTTTGTGT GTTAGAGTTA TAAATCATTA ATCTTTATTT CGGGTGGTTT
66701 ACGTTTATGC CAGTTCCTTT ATATTTAAAT TTCTTGTTTT ATATATTTTG
66751 AATGTCTTTA TAGATTTCTT TAAATTTCCT TATAGAACCA TTAATAGAAA
66801 ATCATTACAT TTAAAATATA CCTTACAGCA AAAGCATCCA AATAAGTATA
66851 GGGTTTATGT CCTTATTTTT CTTTCAGCTG AATACGAATG AGCACAGTGG
66901 TGGAATTTCT GAAGGGAAGT GATGAAATTA TATTTATTTC AGTGGGCACT
66951 TTTCCATTTT ACCACTGTAC CATTATTTGG TTCCTGGAGT TATACACTAA
67001 TTTTCAGTAT ATTACTGTTA AATTACCAAC ACAAGGCAAT TTATTTGAAA
67051 GATTCCGTTT ATCCTGCCAT TGCTTTGAAA AGCAGCAGGA AACGAAATCC
67101 TTTGACTTGT ATCAGCTTCT GCAGAGCATC TTTGTTTTCC TTTGTCCTTT
67151 GTTTCCTACC TTTTGAATCA GATTCCGTTT TAGTCAGGAA GACTTCTTGG
67201 GACCATTCTT AGTAACCTGA AATTTCTTTT TTAATTGCAT GAAGTGGATT
67251 GATCATGAGC AAATGATGTG CTTATTTCTC CCTCACTGTT GAATATCTTT
67301 GAACTTGCTG TTTTCAATAT GGGCAGCACA AAGGTGAGAG ATACATATTA
67351 ATAGTAGTAT GTATTACTCT TATACATTAG ATACCTATAT TTAAATGAAA
67401 GGCCCAATTT GTAAACATAT ACATTCATAT TCTCTCTTGC CCCAAGTTTT
67451 AGGAACATGT TAGGATATAG GAGACTTAAT TTATAATAAT GAGAGCATTT
67501 TTTTATTTTA CTAAAGCCAT TTTTATAGTC AACTATCTTT TCTTATTTGT
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67601 TAATTTAGTT CTTAAACTCA TTTCACTTCT AATAATTTCT GTTATAAATT
67651 GCCAGCATTT TAATGAAAAT CTAATGATGT AATAGGCATT TTCTTTATTT
67701 GAACCTACCT CTTTTATTTT CTGAACCAAA GAGAAAGATG GACTGGTGTT
67751 TGTGAAACAT TTTTAAAAAT GTAGTTTCAT TTATATTAGT TATGTTTGAT
67801 AAATGTCTCA GTATTTTTAT AATATGATAA GCCTGGGATT CTACTTTTAG
67851 GGTTATTTGT ACTTTTGAGT AATATATAAA GTGACAATAT TAAGGTACAT
67901 GATCAGCTCT TTCTATTTTT ACTCGTAAAA ATTATGGAAA TGAATAATTT
67951 TGCTAACAAC TTTGAAATTT CAAACTTCTG GAAAATATGA AAATATTCAT
68001 TGTTCATTAT GAATTTAAAT TGTAAGGTAT GAATGTGATT TGTCTGTACA
68051 TCTTGTATCT TTTCCAAAAA ATGATTCTGT ATCTTTTGGA AAAAAGCCGA
68101 GAGTTGAAGA TAGTATATTT CTGGTAGTAC TGAATATTTA CTTACAGTTT
68151 CTATCAAAAA TATATATTTG TTTCTAAAAT TACTTGTTTT CCAGTTTTTA
68201 TTTTTTTTAG AGAAAATTCT TAAGTCTCAG TTTCCTAATT GAAAAAAAAA
68251 AATTATAAAT AAAGCAAAAA TTGTATCCTA CAGCTTAGCT AGCTTAGATG
68301 TTTGGCACCA GTTTGAATCA TGCTTTTTAC AGCTGGCTCC ATGTAGTCTT
68351 TCCAAACATT TTGGCCTTTC CTGAGCAGCC CTTGTAGATA TTGTCTGTAT
68401 GATGCATTTT GACACAAGGT GATATTTTTT GTGATATCAA AATTCCACAT
68451 TTACCCATTA GAGTTACAGC CCTGGGGTTC ACAGTACCAA GGGGGACCCA
68501 GAGCCTCAGG ATTGGCCAGG CTCATTTTGC CGTGGAGTAT CAGTTTGTCT
68551 TGAAATTGTG GGAAAAAATT CTAAGTTGAA TTCACTGGTA AGTAATTTTT
68601 TAAAATTTCA TAATGCAGAT TACATCCAAA ATTTGATTTA AAAATTAAAA
68651 CATAAGACTG CAGAGAAATT CTGCATTTCA ACTCCAATAC TATCCAGACT
68701 TCAGAAATAA CTTATCAGTT ATTTCTGTAA GCTTCTTGCT TACCTGGATA
68751 CCTGACAGGT GAGATGGCTG TAGCAGACAC TGGCAGTTCC CTGCCCACAC
68801 ACCTGTCCCT GTCCACAGCT GCACAAGGCA GCTCTGTGTG CAATTGCCAG
68851 CATCTGCTCC TCTGTTCTCA GGGAATCTTT GTTAGAAAAA TGCTGCCATA
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68951 GCAAGCAGAG ATTGTACTTT ACAGTATTTT GTCTTTGAGC TTGGCATTAG
69001 GTTGCATTTG TAAAAATGTG GCATGGCTTC CTCATCCCCC AATAGGAACT
69051 TTGCCAGCCC TTTTGTTCTC ATGGAACTTC CTTTTTTGAA AAGAGCACCA
69101 AAGGAGTAAA AATACTGTGG AGGGAGCAAC CCTCCTTTGC CATATGCTCT
69151 CATTGGGAGA CATGTGGAGC AGTCTGAAGT CATTTAGGCC ACTCTCTGGG
69201 AGAGCACATC CTATGATGTT CTCCCAGCCT AGCCCCTTCC ACTGTGCTCA
69251 AGTCCAAGCT GACCAGCTTT CTGACCACAG TGTAAACAAA GATGATTGTC

69301 AGTGGGCCCC AGAATCCTAT ACCCAGA

FEATURES:

Start:	2132
Exon:	2132-2314
Intron:	2315-17055
Exon:	17056-17182
Intron:	17183-20983
Exon:	20984-21071
Intron:	21072-41719
Exon:	41720-41831
Intron:	41832-45391
Exon:	45392-45550
Intron:	45551-47878
Exon:	47879-48031
Intron:	48032-54612
Exon:	54613-54720
Intron:	54721-59290
Exon:	59291-59458
Intron:	59459-63791
Exon:	63792-63942
Intron:	63943-66164
Exon:	66165-66346
Stop:	66347

CHROMOSOME MAP POSITION:
Chromosome 1

ALLELIC VARIANTS (SNPs):

DNA Position	Major	Minor	Domain
1722	G	C A	Beyond ORF(5')
1767	C	G A	Beyond ORF(5')
1840	C	G	Beyond ORF(5')
1857	T	G	Beyond ORF(5')
1945	G	T	Beyond ORF(5')
2007	A	C	Beyond ORF(5')
2769	C	G	Intron
3664	C	T	Intron
3827	G	A	Intron
4113	C	T	Intron
4337	A	G	Intron
4473	G	A	Intron
6455	T	G	Intron
6533	T	G A	Intron
6919	G	C	Intron
7305	G	A	Intron
7340	A	G	Intron
7466	A	G	Intron
7589	G	C	Intron
7810	A	C	Intron
9104	G	A	Intron
9503	A	T	Intron
9898	G	C	Intron
10196	T	C	Intron
12327	C	G A	Intron
13749	G	A	Intron
14150	T	C	Intron
14529	G	A	Intron
14653	G	A	Intron
15871	A	G	Intron
19244	G	A	Intron

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19387	T	G	Intron
19447	C	G	Intron
20076	T	C	Intron
20492	T	-	Intron
20868	T	C	Intron
20941	T	C	Intron
21116	C	T	Intron
21701	G	A	Intron
21710	A	-	Intron
21826	C	T	Intron
21840	-	T	Intron
21841	-	C T	Intron
21843	-	C	Intron
22045	C	A T	Intron
22061	G	T	Intron
22348	-	A G	Intron
22682	A	G T	Intron
22783	-	T	Intron
23448	A	G	Intron
24960	G	A	Intron
24983	T	C	Intron
25390	T	C	Intron
26060	C	T	Intron
30245	C	G	Intron
33664	G	T	Intron
33883	C	A	Intron
34373	G	A	Intron
34558	G	T	Intron
43929	T	A	Intron
44309	T	- C	Intron
44997	T	G	Intron
46538	A	G	Intron
48153	T	C	Intron
48288	G	T	Intron
48412	G	A	Intron
48446	C	G	Intron
48456	G	C	Intron
48789	C	-	Intron
48859	G	C	Intron
49126	A	G	Intron
49378	T	G	Intron
49482	A	C	Intron
49741	G	A	Intron
49840	A	G	Intron
50102	G	A	Intron
50109	C	G T	Intron
50747	G	A	Intron
51272	G	A	Intron
52842	G	A	Intron
61837	A	G	Intron
62018	A	G	Intron
65562	A	G	Intron
65780	G	A	Intron
66092	G	A	Intron
66617	C	T	Beyond ORF(3')
66892	G	A	Beyond ORF(3')
67263	G	A	Beyond ORF(3')
67651	G	T	Beyond ORF(3')
67935	C	T	Beyond ORF(3')
69000	T	G	Beyond ORF(3')
69134	C	T	Beyond ORF(3')

Context:

DNA
Position

1722 TTGCCCACGCAGATGGCTGTTGATCTTTTCTGCAACAAATCCAGGAGTTTCTCCTTTTTG
TTTTATAATTGCTCCAATAGATGCTTTAGGATTTAACTCTCTGCTTTTTAAAGCAGAATC
GCCATCCCAGGTGTGCAACCACGAAAAAATTAGACATCCGTGAGAGACAATGCCCTCCAT
GGCCCAGTTTCCAGGCAGAGAGAAGCAGCTCTGGGCTGACCGCCAAGGCTCCGGCCCGAG
AGGGTCTTTAAGTGGAGTAACCAGTCTTCAAGACCCCGCTCCCAAGCCACCGACGCGCTG
[G,C,A]
CGCTGCAGCCCTGGACCTGCTGGGGGCCTCTTCCTCGGACCCGCATGCTGACAGCGGGAC
TGGCAACTGGGCAGAGGTCGACCCCGGGTCCGCACAGCACCTCCCGAGACCCAGCTCCCA
GCTCCCTCACTTCCGGCTCTCTGGAGGCGGGCCCGGCCAGTGCCGCCGAGGCCAGCGCGG
CGAGCTCCTCCCCAGCAGCGGCGGGACGGCCACACCCTGCGCGCCGCGCGGGCTCGGGTG
GGGTCTCCGCTCCTGCGCCCTGCGCGCCGCAGCCGCACCCCCGACGGCGCCCCAAACGCT

1767 AGTTTCTCCTTTTTGTTTTATAATTGCTCCAATAGATGCTTTAGGATTTAACTCTCTGCT
TTTTAAAGCAGAATCGCCATCCCAGGTGTGCAACCACGAAAAAATTAGACATCCGTGAGA
GACAATGCCCTCCATGGCCCAGTTTCCAGGCAGAGAGAAGCAGCTCTGGGCTGACCGCCA
AGGCTCCGGCCCGAGAGGGTCTTTAAGTGGAGTAACCAGTCTTCAAGACCCCGCTCCCAA
GCCACCGACGCGCTGACGCTGCAGCCCTGGACCTGCTGGGGGCCTCTTCCTCGGACCCGC
[C,G,A]
TGCTGACAGCGGGACTGGCAACTGGGCAGAGGTCGACCCCGGGTCCGCACAGCACCTCCC
GAGACCCAGCTCCCAGCTCCCTCACTTCCGGCTCTCTGGAGGCGGGCCCGGCCAGTGCCG
CCGAGGCCAGCGCGGCGAGCTCCTCCCCAGCAGCGGCGGGACGGCCACACCCTGCGCGCC
GCGCGGGCTCGGGTGGGGTCTCCGCTCCTGCGCCCTGCGCGCCGCAGCCGCACCCCCGAC
GGCGCCCCAAACGCTGTTGCGCCGCGCGCCCCGCCCAGCCCGGCCTCGCGCTGGTCCCGG

1840 TCGCCATCCCAGGTGTGCAACCACGAAAAAATTAGACATCCGTGAGAGACAATGCCCTCC
ATGGCCCAGTTTCCAGGCAGAGAGAAGCAGCTCTGGGCTGACCGCCAAGGCTCCGGCCCG
AGAGGGTCTTTAAGTGGAGTAACCAGTCTTCAAGACCCCGCTCCCAAGCCACCGACGCGC
TGACGCTGCAGCCCTGGACCTGCTGGGGGCCTCTTCCTCGGACCCGCATGCTGACAGCGG
GACTGGCAACTGGGCAGAGGTCGACCCCGGGTCCGCACAGCACCTCCCGAGACCCAGCTC
[C,G]
CAGCTCCCTCACTTCCGGCTCTCTGGAGGCGGGCCCGGCCAGTGCCGCCGAGGCCAGCGC
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TGGGGTCTCCGCTCCTGCGCCCTGCGCGCCGCAGCCGCACCCCCGACGGCGCCCCAAACG
CTGTTGCGCCGCGCGCCCCGCCCAGCCCGGCCTCGCGCTGGTCCCGGTCTCGCCCCGCAG
CCCTCGATCTCCCGTGACTTCCTCGGCCAGGCCGCCTGCGCCTCTGGGACCATGTTGCGC

1857 CAACCACGAAAAAATTAGACATCCGTGAGAGACAATGCCCTCCATGGCCCAGTTTCCAGG
CAGAGAGAAGCAGCTCTGGGCTGACCGCCAAGGCTCCGGCCCGAGAGGGTCTTTAAGTGG
AGTAACCAGTCTTCAAGACCCCGCTCCCAAGCCACCGACGCGCTGACGCTGCAGCCCTGG
ACCTGCTGGGGGCCTCTTCCTCGGACCCGCATGCTGACAGCGGGACTGGCAACTGGGCAG
AGGTCGACCCCGGGTCCGCACAGCACCTCCCGAGACCCAGCTCCCAGCTCCCTCACTTCC
[T,G]
GCTCTCTGGAGGCGGGCCCGGCCAGTGCCGCCGAGGCCAGCGCGGCGAGCTCCTCCCCAG
CAGCGGCGGGACGGCCACACCCTGCGCGCCGCGCGGGCTCGGGTGGGGTCTCCGCTCCTG
CGCCCTGCGCGCCGCAGCCGCACCCCCGACGGCGCCCCAAACGCTGTTGCGCCGCGCGCC
CCGCCCAGCCCGGCCTCGCGCTGGTCCCGGTCTCGCCCCGCAGCCCTCGATCTCCCGTGA
CTTCCTCGGCCAGGCCGCCTGCGCCTCTGGGACCATGTTGCGCTGGCTGCGGGACTTCGT

1945 CAAGGCTCCGGCCCGAGAGGGTCTTTAAGTGGAGTAACCAGTCTTCAAGACCCCGCTCCC
AAGCCACCGACGCGCTGACGCTGCAGCCCTGGACCTGCTGGGGGCCTCTTCCTCGGACCC
GCATGCTGACAGCGGGACTGGCAACTGGGCAGAGGTCGACCCCGGGTCCGCACAGCACCT
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Replacement Sheet

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Replacement Sheet

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66092 TTGGATCTCAGCCCTACCATTTTCTACTTAGATTTTTTTAGGACAAATTTCTCCATCTTT
CTAAGCCTCCAATTGCTCACTTACAAAATTGATATAACATTTACCTTGCAAGATTGGTAT
GGAAGGTAATTAACCCAGTATTTAGAACATAGTAATTAATAAATAACTATTATTACCATC

FIGURE 3, page 40 of 42

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ATTACTATAGTTAGGACACTCACTGTTAGGTGCTATACAAAGAGGATCATAAAAGGGATG
TTGTCTTGGGCTTCTTGGAATAAATGTTGTCCTTTTACTGTATTTTAGAATATCATTCTG
[G,A]
GTCATAATTGTTTGTTGTCATAATAATGAAACATACTTGAATATTAAATTACCCTCTTTT
TTTATTTTTTAGCCATGTTAGAAGGTTCCCCACAGCTGAATATGGTTGGCCTCTTTCGAC
GAATTATTTCCAAAGAAGGAATACCAGGACTTTACAGAGGCATCACCCCAAACTTCATGA
AGGTGCTCCCTGCTGTAGGCATCAGTTATGTGGTTTATGAAAATATGAAGCAAACTTTAG
GAGTAACCCAGAAATGATGTTGCATTTTTTGCTTTAGCCTGATAATTGAAACTTTCAACA

66617 ATGAAGCAAACTTTAGGAGTAACCCAGAAATGATGTTGCATTTTTTGCTTTAGCCTGATA
ATTGAAACTTTCAACAATCTCTGGAGTGACTTTTTCTCCTCGAATTGAAACAAGTCTATG
GCAAAAGAAGCTGCATTTTTTTCACAAAAGGGAAGATGGTAACAATGGTCACTTCAAACT
TTTGGGCTAAATTATATGTACACAGAAATGTTCAAAATCATAGTTTTAATGTGTTTTGAA
AAGGCCACACAATTATACTTTATCTTTTCTTAATAATCCTGCAAATCTCTGCCCTGAATC
[C,T]
GAAATCTGAAAATGTACTGGCTTGAACAAAATTTGTTTTGTGTGTTAGAGTTATAAATCA
TTAATCTTTATTTCGGGTGGTTTACGTTTATGCCAGTTCCTTTATATTTAAATTTCTTGT
TTTATATATTTTGAATGTCTTTATAGATTTCTTTAAATTTCCTTATAGAACCATTAATAG
AAAATCATTACATTTAAAATATACCTTACAGCAAAAGCATCCAAATAAGTATAGGGTTTA
TGTCCTTATTTTTCTTTCAGCTGAATACGAATGAGCACAGTGGTGGAATTTCTGAAGGGA

66892 ATCCTGCAAATCTCTGCCCTGAATCCGAAATCTGAAAATGTACTGGCTTGAACAAAATTT
GTTTTGTGTGTTAGAGTTATAAATCATTAATCTTTATTTCGGGTGGTTTACGTTTATGCC
AGTTCCTTTATATTTAAATTTCTTGTTTTATATATTTTGAATGTCTTTATAGATTTCTTT
AAATTTCCTTATAGAACCATTAATAGAAAATCATTACATTTAAAATATACCTTACAGCAA
AAGCATCCAAATAAGTATAGGGTTTATGTCCTTATTTTTCTTTCAGCTGAATACGAATGA
[G,A]
CACAGTGGTGGAATTTCTGAAGGGAAGTGATGAAATTATATTTATTTCAGTGGGCACTTT
TCCATTTTACCACTGTACCATTATTTGGTTCCTGGAGTTATACACTAATTTTCAGTATAT
TACTGTTAAATTACCAACACAAGGCAATTTATTTGAAAGATTCCGTTTATCCTGCCATTG
CTTTGAAAAGCAGCAGGAAACGAAATCCTTTGACTTGTATCAGCTTCTGCAGAGCATCTT
TGTTTTCCTTTGTCCTTTGTTTCCTACCTTTTGAATCAGATTCCGTTTTAGTCAGGAAGA

67263 CACTGTACCATTATTTGGTTCCTGGAGTTATACACTAATTTTCAGTATATTACTGTTAAA
TTACCAACACAAGGCAATTTATTTGAAAGATTCCGTTTATCCTGCCATTGCTTTGAAAAG
CAGCAGGAAACGAAATCCTTTGACTTGTATCAGCTTCTGCAGAGCATCTTTGTTTTCCTT
TGTCCTTTGTTTCCTACCTTTTGAATCAGATTCCGTTTTAGTCAGGAAGACTTCTTGGGA
CCATTCTTAGTAACCTGAAATTTCTTTTTTAATTGCATGAAGTGGATTGATCATGAGCAA
[G,A]
TGATGTGCTTATTTCTCCCTCACTGTTGAATATCTTTGAACTTGCTGTTTTCAATATGGG
CAGCACAAAGGTGAGAGATACATATTAATAGTAGTATGTATTACTCTTATACATTAGATA
CCTATATTTAAATGAAAGGCCCAATTTGTAAACATATACATTCATATTCTCTCTTGCCCC
AAGTTTTAGGAACATGTTAGGATATAGGAGACTTAATTTATAATAATGAGAGCATTTTTT
TATTTTACTAAAGCCATTTTTATAGTCAACTATCTTTTCTTATTTGTGTGATTAGAACTT

67651 ATAGTAGTATGTATTACTCTTATACATTAGATACCTATATTTAAATGAAAGGCCCAATTT
GTAAACATATACATTCATATTCTCTCTTGCCCCAAGTTTTAGGAACATGTTAGGATATAG
GAGACTTAATTTATAATAATGAGAGCATTTTTTTATTTTACTAAAGCCATTTTTATAGTC
AACTATCTTTTCTTATTTGTGTGATTAGAACTTAGAAAAATATTTACTAGTTGAAGTTAT
TATCAGTTTTTAATTTAGTTCTTAAACTCATTTCACTTCTAATAATTTCTGTTATAAATT
[G,T]
CCAGCATTTTAATGAAAATCTAATGATGTAATAGGCATTTTCTTTATTTGAACCTACCTC
TTTTATTTTCTGAACCAAAGAGAAAGATGGACTGGTGTTTGTGAAACATTTTTAAAAATG
TAGTTTCATTTATATTAGTTATGTTTGATAAATGTCTCAGTATTTTTATAATATGATAAG
CCTGGGATTCTACTTTTAGGGTTATTTGTACTTTTGAGTAATATATAAAGTGACAATATT
AAGGTACATGATCAGCTCTTTCTATTTTTACTCGTAAAAATTATGGAAATGAATAATTTT

67935 ATTTCTGTTATAAATTGCCAGCATTTTAATGAAAATCTAATGATGTAATAGGCATTTTCT
TTATTTGAACCTACCTCTTTTATTTTCTGAACCAAAGAGAAAGATGGACTGGTGTTTGTG
AAACATTTTTAAAAATGTAGTTTCATTTATATTAGTTATGTTTGATAAATGTCTCAGTAT
TTTTATAATATGATAAGCCTGGGATTCTACTTTTAGGGTTATTTGTACTTTTGAGTAATA
TATAAAGTGACAATATTAAGGTACATGATCAGCTCTTTCTATTTTTACTCGTAAAAATTA
[C,T]

GGAAATGAATAATTTTGCTAACAACTTTGAAATTTCAAACTTCTGGAAAATATGAAAATA
TTCATTGTTCATTATGAATTTAAATTGTAAGGTATGAATGTGATTTGTCTGTACATCTTG
TATCTTTTCCAAAAAATGATTCTGTATCTTTTGGAAAAAAGCCGAGAGTTGAAGATAGTA
TATTTCTGGTAGTACTGAATATTTACTTACAGTTTCTATCAAAAATATATATTTGTTTCT
AAAATTACTTGTTTTCCAGTTTTTATTTTTTTTAGAGAAAATTCTTAAGTCTCAGTTTCC

69000 TTCAGAAATAACTTATCAGTTATTTCTGTAAGCTTCTTGCTTACCTGGATACCTGACAGG
TGAGATGGCTGTAGCAGACACTGGCAGTTCCCTGCCCACACACCTGTCCCTGTCCACAGC
TGCACAAGGCAGCTCTGTGTGCAATTGCCAGCATCTGCTCCTCTGTTCTCAGGGAATCTT
TGTTAGAAAAATGCTGCCATATTTGTTTCTCACCTATTAGTCTTGTCTCCCAGTCAAGAG
AATAAATTTATGCAAGCAGAGATTGTACTTTACAGTATTTTGTCTTTGAGCTTGGCATTA
[T,G]
GTTGCATTTGTAAAAATGTGGCATGGCTTCCTCATCCCCCAATAGGAACTTTGCCAGCCC
TTTTGTTCTCATGGAACTTCCTTTTTTGAAAAGAGCACCAAAGGAGTAAAAATACTGTGG
AGGGAGCAACCCTCCTTTGCCATATGCTCTCATTGGGAGACATGTGGAGCAGTCTGAAGT
CATTTAGGCCACTCTCTGGGAGAGCACATCCTATGATGTTCTCCCAGCCTAGCCCCTTCC
ACTGTGCTCAAGTCCAAGCTGACCAGCTTTCTGACCACAGTGTAAACAAAGATGATTGTC

69134 CTGTGTGCAATTGCCAGCATCTGCTCCTCTGTTCTCAGGGAATCTTTGTTAGAAAAATGC
TGCCATATTTGTTTCTCACCTATTAGTCTTGTCTCCCAGTCAAGAGAATAAATTTATGCA
AGCAGAGATTGTACTTTACAGTATTTTGTCTTTGAGCTTGGCATTAGGTTGCATTTGTAA
AAATGTGGCATGGCTTCCTCATCCCCCAATAGGAACTTTGCCAGCCCTTTTGTTCTCATG
GAACTTCCTTTTTTGAAAAGAGCACCAAAGGAGTAAAAATACTGTGGAGGGAGCAACCCT
[C,T]
CTTTGCCATATGCTCTCATTGGGAGACATGTGGAGCAGTCTGAAGTCATTTAGGCCACTC
TCTGGGAGAGCACATCCTATGATGTTCTCCCAGCCTAGCCCCTTCCACTGTGCTCAAGTC
CAAGCTGACCAGCTTTCTGACCACAGTGTAAACAAAGATGATTGTCAGTGGGCCCCAGAA
TCCTATACCCAGA